

REMARKS

The present application is a continuation of parent application 09/410,602, filed on February 11, 2002. A Petition for Revival was also filed for the parent application on the same date. Prior to the revival petition, the parent application was considered abandoned for failure to respond to an Office Action issued on December 20, 2000. In that December 20, 2000 Office Action, the Examiner indicated that claims 3-6, 9, and 11 are allowable, and indicated that claims 7 and 8 would also be allowable if rewritten to clarify the antecedent basis of certain elements in those claims. The Examiner also rejected claims 1, 2, and 10 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,877,920 to Resh. The above claim amendments are submitted with the following remarks to be fully responsive to the December 20, 2000 Office Action and to place the present application in condition for allowance.

The present invention is directed to a method of assembling a head gimbal assembly as a sequence of steps performed in a specific order, as set out in claim 1. First, a head/slider, which includes at least one termination pad, is attached to a flex circuit, which includes at least one electrical lead, to form a head/slider circuited gimbal assembly having at least one static angle. Next, the termination pad of the head/slider is electrically connected to an electrical lead of the flex circuit. Finally, the head/slider circuited gimbal assembly is attached to a suspension having at least one static angle. As set out in detail in the specification of the present application, there are multiple advantages to this sequence of assembling the head gimbal assembly. Many of these advantages are achieved because attachment of the head/slider to the flex circuit and attachment of the termination pad of the head/slider to the electrical lead of the flex circuit are accomplished prior to the attachment of these components to a suspension.

In contrast, Resh does not disclose assembling a head gimbal assembly in any such order. In fact, Resh describes the following assembly steps for a head suspension assembly in col. 5, lines 43-46: "First, the gimbal is aligned with and welded to the load beam. Next, the gimbal and the load beam are together placed over the head and adhered to the head along the head mounting pad." In other words, a head is attached to the gimbal and load beam assembly *after*

Serial No. 10/073,600
March 18, 2002
Page 4

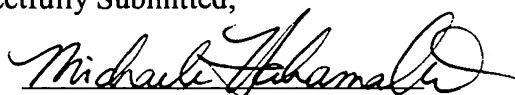
the gimbal is attached to a load beam. This method is clearly in contrast to the method of the present independent claim 1, and the claims that depend therefrom.

Further, Applicants respectfully disagree that any of the Examiner's references to specific portions of Resh disclose the assembly method of the present invention. Specifically, although Figures 2 and 4 show a head suspension assembly that includes a record head attached to flex beams, nothing in the figures or the descriptions thereof indicates that the operations used to produce this assembly would be accomplished in same sequence of steps recited in the present claim 1. Similarly, Figure 11 and its corresponding description show an alternative embodiment of a head suspension assembly including a load beam and gimbal, in which electrical traces from a gimbal are attached to a head. Again, Resh fails here to disclose an assembly sequence that includes attaching a head/slider to a flex circuit or gimbal *before* these components are attached to a suspension. Finally, while Figures 6a and 6b seem to illustrate bond angles between a head and a gimbal, there is no indication that these components were assembled in the order recited in the present claim 1. Accordingly, claims 1, 2 and 10 are not anticipated by Resh under 35 U.S.C. 102(b) and removal of the rejection thereof is respectfully requested.

In addition, claims 1-5, 7, 8, and 10 have been amended to clarify the claim language with respect to the antecedent basis for certain claim terms. Accordingly, allowance of pending claims 1-11 is requested. If a telephonic conference would be helpful in resolving any outstanding issues in the present application, the Examiner is invited to contact Applicants' undersigned representative.

Respectfully Submitted,

By:



Michael A. Hakamaki, #40,011
Kagan Binder, PLLC
221 Main Street North
Suite 200, Maple Island Building
Stillwater, MN 55082
Phone: (651)275-9839
Facsimile: (651) 351-2954

Dated: March 18, 2002

MAH/3120

EXHIBIT A
(Version with markings to show changes made)

1. (Amended) A method of assembling a head gimbal assembly comprising the following steps performed in the following order:

attaching a head/slider having at least one termination pad to a flex circuit having at least one electrical lead to produce a head/slider circuited gimbal assembly having at least one static angle;

electrically connecting the at least one termination pad of the head/slider to the at least one electrical lead of the flex circuit; and

attaching the head/slider circuited gimbal assembly to a suspension having at least one static angle.

2. (Amended) The method of claim 1 and further including:

determining the at least one static [angles] angle of the head/slider circuited gimbal assembly after the step of electrically connecting the at least one termination pad of the head/slider to the at least one electrical lead of the flex circuit.

3. (Amended) The method of claim 2 and further including:

determining the at least one static [angles] angle of the suspension prior to the step of attaching the head/slider circuited gimbal assembly to the suspension.

4. (Amended) The method of claim 3 and further including performing a dynamic electrical test on the head/slider circuited gimbal assembly prior to determining the at least one static [suspension angles] angle of the suspension.

5. (Amended) The method of claim 4 and further including determining [the] an offset between the head/slider circuited gimbal assembly prior to attaching it to the suspension.

7. (Amended) The method of claim 1 and further including:

determining the at least one static [angles] angle of the suspension prior to the step of attaching the head/slider circuited gimbal assembly to the suspension.

Serial No. 10/073,600

March 18, 2002

Page 6

8. (Amended) The method of claim 1 and further including performing a dynamic electrical test on the head/slider circuited gimbal assembly prior to determining the at least one static [suspension angles] angle of the suspension.

10. (Amended) The method of claim 1 and further including determining [the] an offset between the head/slider circuited gimbal assembly prior to attaching it to the suspension.